

## The Botany of the Islands of Mersing District, Johore, Peninsular Malaysia. 2. The Floras of Pulau Aur and Pulau Pemanggil, with Notes on the Smaller Islands

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### Abstract

All the records for vascular plants found growing on Pulau Aur, its small neighbour Pulau Dayang, and Pulau Pemanggil, islands in the Mersing District of Johore, Peninsular Malaysia are collated and listed. Notes on the botany of some of the smaller islands in the vicinity are also presented. A total of more than 180 species are listed for Pulau Aur. It is notable as the only Malaysian locality for the rubiaceous tree *Zuccarinia macrophylla*. Other rare species recorded from the island include *Selaginella plana* (Selaginellaceae), *Operculina riedeliana* (Convolvulaceae), *Thrixspermum carinatifolium* (Orchidaceae), *Rauvolfia sumatrana* (Apocynaceae), *Canarium hirsutum* (Burseraceae) and *Hymenodictyon orixense* (Rubiaceae). A list of the 172 vascular plant species recorded as growing on Pulau Pemanggil is presented. Notable collections include *Lasianthus barbellatus* (Rubiaceae), *Didymocarpus tiumanicus* (Gesneriaceae), *Mallotus moritzianus* (Euphorbiaceae) and *Margaritaria indica* (Euphorbiaceae). Pulau Sibul is relatively well-known botanically. Details of some recent collections from Pulau Besar are given. Pulau Tengah is notable for records of *Argusia argentea* (Boraginaceae) and *Schizachyrium sanguineum* (Gramineae).

## PULAU AUR

### Introduction

Pulau Aur (104° 32' E 2° 27' N) is the most remote of the Johore islands (Fig. 1), lying some 62 km from the Johore coast, about 74 km due east of Mersing. Aur covers about 19 km<sup>2</sup>, and the nearby Pulau Dayang about

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1.8 km<sup>2</sup> (Fig. 2). The first botanical collections were made on Pulau Aur more than a century ago when J. Feilding visited the island in 1892. In April-May 1927, M.R. Henderson visited Pulau Aur, Pulau Dayang and Pulau Tioman. Henderson (1930) reported that the human population numbered about 400, which was a considerable reduction compared to a mid-nineteenth century estimate of 1400. Much of the native vegetation was cleared for cultivation when Aur was heavily populated, but since then secondary forest has developed on many areas away from the coasts. Except for a short note on some common plants (Marchette 1964), there has been no publication on the flora of Pulau Aur since Henderson's paper. In this paper we collate all vascular plant records for Aur and Dayang that we have been able to verify from material in various herbaria (SING, SINU and UKMB) in Malaysia and Singapore. Recent collecting trips were made by a group from Universiti Kebangsaan Malaysia in January 1988, and by Boo, Chen and Choo in August 1996.

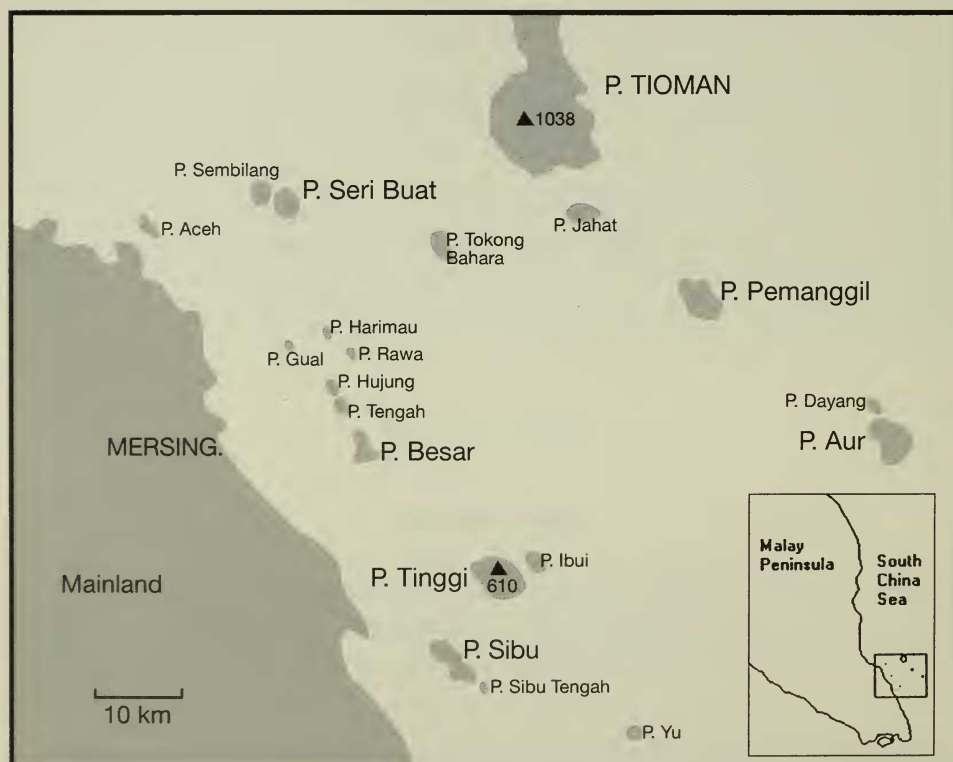
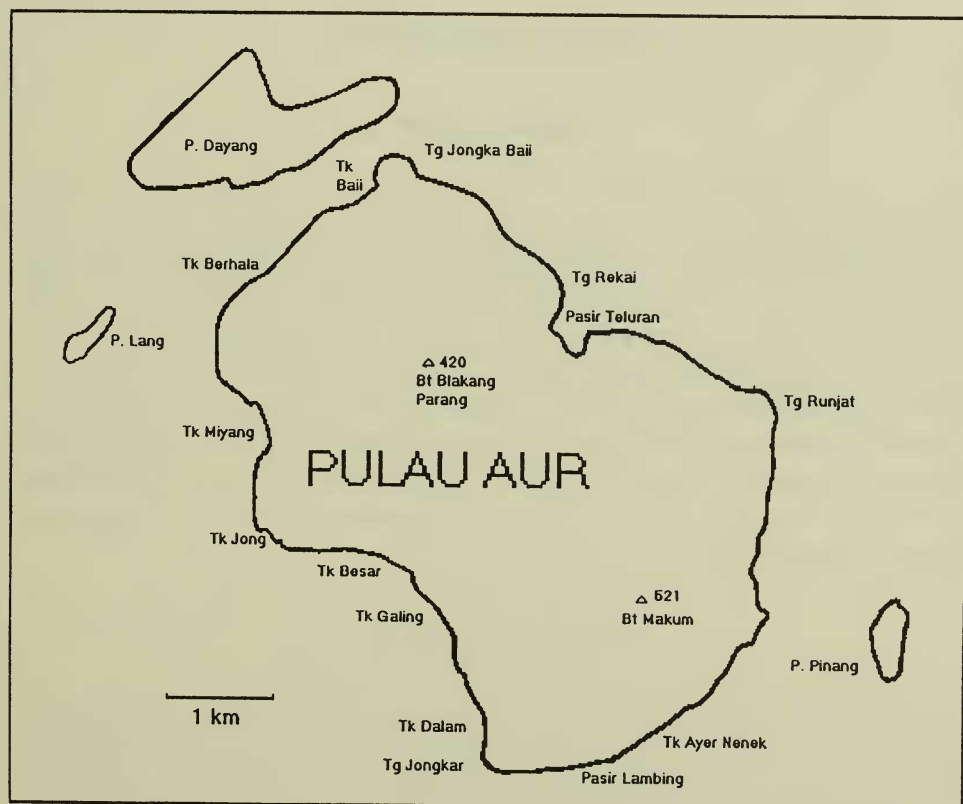


Figure 1. Map of the islands off the east coast of Johore. P. = Pulau, spot heights in metres.

## Literature Records

There are a few records for plants from Aur for which specimens have not been located recently. *Balanophora abbreviata* Blume was reportedly collected by Feilding on Aur (Ridley 1924, as *Balanophora insularis*), but the specimen seems to have eluded all recent authors. All other collections of this parasitic herb from Peninsular Malaysia come from Perak (Kiew 1978). Feilding's Johore grass collections were written up for publication by Rendle (1894), probably based on specimens deposited in the Kew herbarium. Feilding is reported to have collected five species from Pulau Aur, probably *Centotheca lappacea* (L.) Desv., *Coix lacryma-jobi* L., *Dactyloctenium aegyptium* (L.) Willd., *Panicum sarmentosum* Roxb. and *Setaria* sp., but without reference to the specimens it is not possible to be absolutely certain.



**Figure 2.** Map of Pulau Aur and its neighbouring islands. P. = Pulau, Tg = Tanjung, Tk = Telok, Bt = Bukit, spot heights in metres.

## Collections of Interest

We have amassed records of over 180 species from Pulau Aur. These are listed in Appendix 1. Nomenclature follows Turner (1995) where possible. Probably the most important is that of *Zuccarinia macrophylla*, which is the only collection of this species (and genus) from Malaysia (Wong 1989). It is a small rubiaceous tree from lowland forest, and has not been recollected recently from Aur. Other very rare plants found on Aur include *Selaginella plana* (Wong 1983), *Thrixspermum carinatifolium* (Seidenfaden & Wood 1992), *Canarium hirsutum* (Turner *et al.* 1993) and *Operculina riedeliana* (this study). The apocynaceous shrub *Rauvolfia sumatrana* was previously reported from Perak alone in Peninsular Malaysia (Markgraf 1984). Our recent record from Pulau Aur extends the species to Johore. Our discovery of *Hymenodictyon orixense* on Aur is also notable biogeographically being the first record of this species from the east coast of the Malay Peninsula.

## PULAU PEMANGGIL

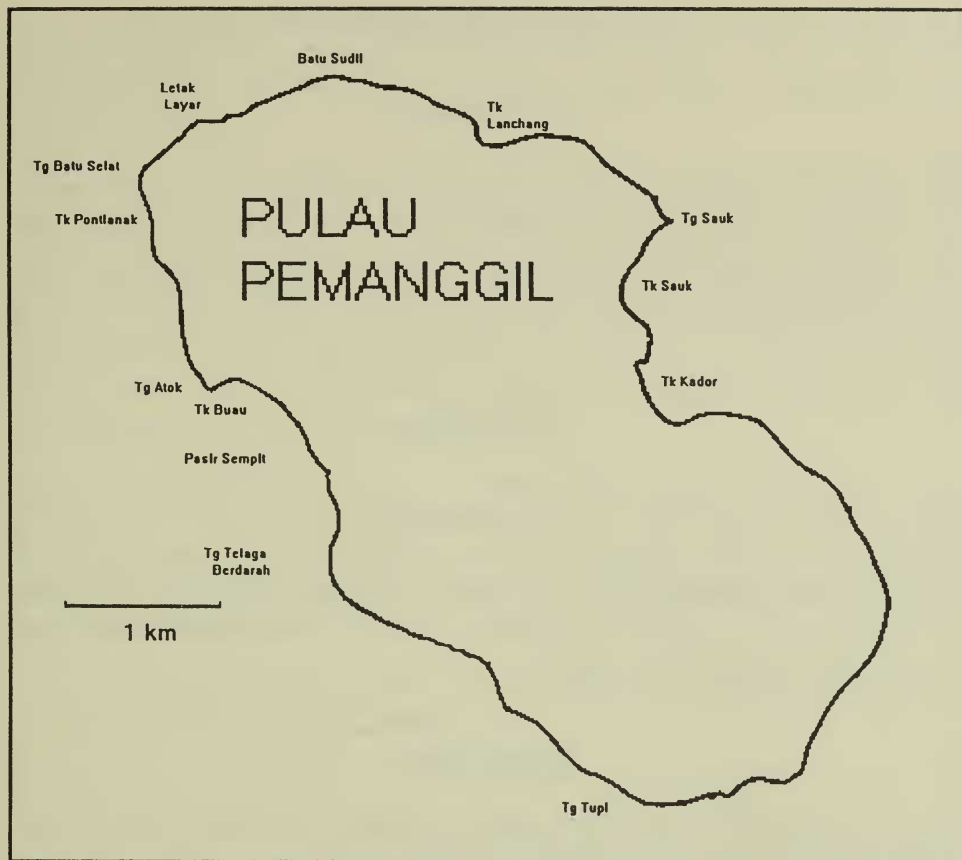
### Introduction

Pulau Pemanggil is an island of about 12 km<sup>2</sup> (Fig. 3) lying between Pulau Tioman and Pulau Aur in the South China Sea, about 50 km from the Johore mainland (Fig. 1). Pulau Pemanggil is one of the botanically least well-known of the islands of Mersing district. It was the subject of a paper by Latiff (1982), but otherwise little has been published regarding the vascular plants found on the island. Md. Noor and Samsuri collected on the island in 1966. Latiff and his students visited in January 1980 and Boo, Chen and Choo collected there in August 1996. We have collated all the records for vascular plants collected from Pulau Pemanggil in herbaria available to us (KEP, SING, SINU and UKMB) and a list of 172 species is given in Appendix 1.

### Notable Collections

*Lasianthus barbellatus*, *Didymocarpus tiumanicus* and *Mallotus moritzianus* are very rare species in Peninsular Malaysia that are recorded from Pulau Pemanggil. Henderson (1930) reported the first two species as endemic to Pulau Tioman, but both have subsequently been found on Pulau Pemanggil. *Didymocarpus tiumanicus* has also been recorded from Pulau Tinggi (Turner





**Figure 3.** Map of Pulau Pemanggil. Tg = Tanjung, Tk = Telok.

*et al.* 1997). *Margaritaria indica* is confined to the Tioman island group in its Peninsular Malaysian range, having also been recorded from Pulau Sibu Tengah and two small islets to the northeast of Pulau Tioman. *Mallotus moritzianus* has been recorded from Trengganu as well as Pulau Pemanggil (Whitmore 1973).

Not quite so rare, but still notable are the occurrence of *Selaginella plana* (Wong 1982), *Aganosma wallichii* (Middleton 1996) and *Marsdenia acuminata* (Ridley 1923, as *Gymnema acuminatum*).

*Deeringia polysperma* is a species generally confined to limestone in Peninsular Malaysia (Chin 1979). Pemanggil does not have any limestone outcrops, and the presence of the species on the island is probably a reflection of the tendency to dry spells of the climate of Pulau Pemanggil and its neighbours, and the abundance of well-drained rocky substrates. Limestone, often being freely draining, tends to support species with ranges extending into drier climates.

## THE SMALLER ISLANDS

### Introduction

We have given accounts of the floras of Pulau Tinggi (Turner *et al.*, 1997) and Pulau Aur and Pulau Pemanggil. There are many other islands, though mostly much smaller than the three already covered, in the Mersing District. In this final section our knowledge of these islands, including some unpublished data, is summarized.

### Pulau Sibü

Pulau Sibü is the best studied island in terms of its botany. A detailed account of the flora and vegetation was given by Turner *et al.* (1993). Pulau Sibü has little undisturbed inland vegetation remaining, but good examples of a number of coastal vegetation types. The peculiar shrubby heathland found on hills overlooking the sea on Pulau Sibü was the topic of a study by Turner *et al.* (1995).

### Pulau Besar

There has been little published about this island. On a brief visit in June 1996, Dr C.L. Loh of the Malaysian Nature Society made some plant collections. A list of the species collected is given in Appendix 1. There are some seagrass meadows in the waters surrounding Pulau Besar. Japar (1994) reports the presence of *Cymodocea serrulata*, *Halodule uninervis*, *Halophila ovalis*, *Halophila spinulosa* and *Syringodium isoetifolium*.

### Other Islands

E.J.H. Corner visited a number of the small islands in the Tioman group on various trips in the period 1932-1936. He reported his botanical findings nearly fifty years later (Corner 1985). Most of the islets he visited were in Pahang, but he did make collections on Pulau Setindan and Pulau Tengah. Notable collections from Pulau Tengah were the first record from the east coast of Peninsular Malaysia for the small coastal shrub *Argusia argentea* (*Messerschmidia argentea* in his paper) and the first record from the Peninsula for the grass *Schizachyrium sanguineum*. Japar (1994) lists the following seagrass species from Pulau Tengah: *Cymodocea serrulata*, *Halodule pinifolia*, *Halodule uninervis* and *Halophila ovalis*.

In the Herbarium of the Singapore Botanic Gardens there are a number of collections made by Mrs Betty Molesworth Allen in July 1955 from Pulau Yu, an island south of Pulau Tinggi. Her ten collections are listed in Appendix 1.

### Acknowledgements

The Malaysian Nature Society are thanked for their support of studies of the plant diversity of the Johore Islands. We are particularly grateful to Dr C.L. Loh for making collections during his visit to Pulau Besar. Dr Ruth Kiew kindly contacted Mrs Molesworth Allen to confirm which Pulau Yu she visited more than forty years ago.

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## Appendix 1. A List of the Plant Species Recorded from Islands in the Mersing District, Johore.

The species are listed with one representative collection for each. Where possible, for Pulau Aur, an indication of records from Pulau Aur and/or Pulau Dayang is given in brackets after each species. A 'c' in the margin next to an entry indicates a species only found in cultivation.

### Pulau Aur

#### PTERIDOPHYTA

##### Aspleniaceae

*Asplenium nidus* L. - Boo, Chen & Choo  
399 [P. Aur] (SINU)

##### Cyatheaceae

*Cyathea squamulata* (Blume) Copel. - Boo,  
Chen & Choo 386 [P. Aur] (SINU)

##### Dennstaedtiaceae

*Lindsaea cultrata* (Willd.) Sw. - Boo, Chen  
& Choo 384 [P. Aur] (SINU)

##### Dryopteridaceae

*Tectaria singaporeana* (Hook. & Grev.)  
Copel. - Boo, Chen & Choo 420 [P. Aur]  
(SINU)

##### Hymenophyllaceae

*Cephalomanes javanicum* (Blume) Bosch  
- Boo, Chen & Choo 286 [P. Aur]  
(SINU)

##### Marattiaceae

*Angiopteris evecta* (G. Forst.) Hoffm. -  
Boo, Chen & Choo 383 [P. Aur] (SINU)

##### Oleandraceae

*Nephrolepis acutifolia* (Desv.) H. Christ.  
- Boo, Chen & Choo 382 [P. Aur]  
(SINU)  
*Nephrolepis auriculata* (L.) Trimen - Boo,  
Chen & Choo 217 [P. Dayang] (SINU)

##### Polypodiaceae

*Pyrrosia angustata* (Sw.) Ching - Boo,  
Chen & Choo 402 [P. Aur] (SINU)  
*Pyrrosia lanceolata* (L.) Farwell - Boo,  
Chen & Choo 257 [P. Aur & P. Dayang]  
(SINU)

##### Pteridaceae

*Pteris ensiformis* Burm.f. - Boo, Chen &  
Choo 186 [P. Aur] (SINU)

##### Schizaeaceae

*Lygodium circinnatum* (Burm.f.) Sw. -  
M.R. Henderson, S.F.N. 18247 (SING)

##### Selaginellaceae

*Selaginella plana* (Desv.) Hieron. - M.R.  
Henderson, S.F.N. 18365 (BM)

##### Thelypteridaceae

*Pronephrium repandum* (Fée) Holttum -  
Boo, Chen & Choo 388 [P. Aur] (SINU)

##### Vittariaceae

*Vittaria ensiformis* Sw. - Boo, Chen &  
Choo 379 [P. Aur] (SINU)

#### SPERMATOPHYTA

##### Acanthaceae

c *Justicia gendarussa* Burm.f. - Boo, Chen  
& Choo 195 [P. Aur] (SINU)



**Alangiaceae**

*Alangium kurzii* Craib - Boo, Chen & Choo 280 [P. Aur & P. Dayang] (SINU)

**Amaranthaceae**

*Cyathula prostrata* (L.) Blume - Boo, Chen & Choo 294 [P. Aur] (SINU)

**Amaryllidaceae**

*Crinum asiaticum* L. - Boo, Chen & Choo 144 [P. Aur] (SINU)  
*Proiphys amboinensis* (L.) Herb. - Boo, Chen & Choo 326 [P. Dayang] (SINU)

**Anacardiaceae**

c *Anacardium occidentale* L. - Boo, Chen & Choo 327 [P. Aur] (SINU)

**Annonaceae**

c *Cananga odorata* (Lam.) Hook.f. & Thomson - A. Latiff & A. Zainudin 2708 [P. Aur] (UKMB)  
*Meiogyne virgata* (Blume) Miq. - M.R. Henderson, S.F.N. 18360 (SING)  
*Friesodielsia affinis* (Hook.f. & Thomson) D. Das - A. Latiff & A. Zainudin 2699 [[P. Aur] (UKMB)  
*Friesodielsia kingii* (J. Sinclair) Steenis - M.R. Henderson, S.F.N. 18235 (SING)  
*Polyalthia cinnamomea* Hook.f. & Thomson - M.R. Henderson, S.F.N. 18216 (SING)

**Apocynaceae**

*Catharanthus roseus* (L.) G. Don - Boo, Chen & Choo 248 [P. Aur & P. Dayang] (SINU)  
*Cerbera manghas* L. - A. Latiff & A. Zainudin 2668 [P. Aur] (UKMB)  
*Cerbera odollam* Gaertn. - Boo, Chen & Choo 314 [P. Dayang] (SINU)  
*Rauvolfia sumatrana* Jack - Boo, Chen & Choo 159 [P. Aur] (SINU)

**Araceae**

*Aglonema simplex* Blume - M.R. Henderson S.F.N. 18221 (SING)  
*Rhaphidophora korthalsii* Schott - Boo, Chen & Choo 380 [P. Aur] (SINU)  
c *Syngonium podophyllum* Schott - Boo, Chen & Choo 284 [P. Aur] (SINU)

**Araliaceae**

*Arthropphyllum diversifolium* Blume - M.R. Henderson, S.F.N. 18362 (SING)  
*Schefflera elliptica* (Blume) Harms - A. Latiff & A. Zainudin 2701 [P. Aur] (UKMB)  
*Schefflera heterophylla* (Wall. ex G. Don) Harms - M.R. Henderson, S.F.N. 18238 (SING)

**Aristolochiaceae**

*Aristolochia tagala* Cham. - M.R. Henderson, S.F.N. 18226 (SING)

**Asclepiadaceae**

*Dischidia bengalensis* Colebr. - Feilding s.n. (SING)  
*Hoya verticillata* (Vahl) G. Don - Boo, Chen & Choo 289 [P. Aur] (SINU)

**Boraginaceae**

*Ehretia timorensis* Decne. - M.R. Henderson, S.F.N. 18203 (SING)

**Bromeliaceae**

c *Ananas comosus* (L.) Merr. - Boo, Chen & Choo 222 [P. Dayang] (SINU)

**Burseraceae**

*Canarium hirsutum* Willd. - M.R. Henderson, S.F.N. 18242 (SING)

**Cactaceae**

*Opuntia monacantha* Haw. - Boo, Chen & Choo 238 [P. Dayang] (SINU)

**Cannaceae**

- c *Canna edulis* Ker Gawl. - Boo, Chen & Choo 213 [P. Dayang] (SINU)

**Capparaceae**

- Cleome viscosa* L. - Boo, Chen & Choo 151 [P. Aur & P. Dayang] (SINU)

**Cecropiaceae**

- Poikilospermum suaveolens* (Blume) Merr. - A. Latiff & A. Zainudin 2705 [P. Aur] (UKMB)

**Combretaceae**

- Quisqualis indica* L. - M.R. Henderson, S.F.N. 18227 (SING)

**Commelinaceae**

- Commelina diffusa* Burm.f. - Boo, Chen & Choo 269 [P. Aur] (SINU)  
*Murdannia nudiflora* (L.) Brenan - Boo, Chen & Choo 163 [P. Aur & P. Dayang] (SINU)

**Compositae**

- Elephantopus scaber* L. - Boo, Chen & Choo 150 [P. Aur] (SINU)  
*Vernonia cinerea* (L.) Less. - Boo, Chen & Choo 179 [P. Aur] (SINU)  
*Vernonia patula* (Dryand.) Merr. - Boo, Chen & Choo 257 [P. Aur] (SINU)  
*Wollastonia biflora* (L.) DC. - Boo, Chen & Choo 220 [P. Dayang] (SINU)

**Convolvulaceae**

- Ipomoea pes-caprae* (L.) R.Br. - Boo, Chen & Choo 233 [P. Dayang] (SINU)  
*Ipomoea pes-tigridis* L. - Boo, Chen & Choo 265 [P. Aur] (SINU)  
*Operculina riedeliana* (Oliv.) Ooststr. - Boo, Chen & Choo 409 [P. Aur] (SINU)

**Crassulaceae**

- Kalanchoe pinnata* (Lam.) Pers. - Boo, Chen & Choo 196 [P. Aur & P. Dayang] (SINU)

**Cycadaceae**

- Cycas ?siamensis* Miq. - Boo, Chen & Choo 305 [P. Dayang] (SINU)

**Cyperaceae**

- Scleria lithosperma* (L.) Sw. - Boo, Chen & Choo 373 [P. Aur] (SINU)

**Dilleniaceae**

- Tetracera indica* (Christm. & Panz.) Merr. - Boo, Chen & Choo 168 [P. Aur] (SINU)

**Dracaenaceae**

- Dracaena elliptica* Thunb. - Boo, Chen & Choo 419 [P. Aur] (SINU)

**Ebenaceae**

- Diospyros cauliflora* Blume - M.R. Henderson, S.F.N. 18276 (SING)

**Escalloniaceae**

- Polyosma integrifolia* Blume - Boo, Chen & Choo 421 [P. Aur] (SINU)

**Euphorbiaceae**

- Claoxylon indicum* (Reinw. ex Blume) Hassk. - Boo, Chen & Choo 279 [P. Aur] (SINU)  
*Cnesmone javanica* Blume - Boo, Chen & Choo 393 [P. Aur] (SINU)  
c *Jatropha curcas* L. - Boo, Chen & Choo 272 [P. Aur] (SINU)  
*Macaranga gigantea* (Rchb.f. & Zoll.) Müll.Arg. - Boo, Chen & Choo 353 [P. Aur] (SINU)  
c *Manihot esculenta* Crantz - Boo, Chen & Choo 245 [P. Aur] (SINU)  
*Melanolepis multiglandulosa* (Reinw. ex Blume) Rchb.f. & Zoll. - Boo, Chen & Choo 278 [P. Aur & P. Dayang] (SINU)  
c *Pedilanthus tithymaloides* Poit. - Boo, Chen & Choo 293 [P. Aur] (SINU)  
*Phyllanthus pulcher* Wall. ex Müll.Arg. - Boo, Chen & Choo 189 [P. Aur] (SINU)

**Flacourtiaceae**

- c *Flacourtia jangomas* (Lour.) Raeusch. -  
Boo, Chen & Choo 405 [P. Aur & P.  
Dayang] (SINU)  
*Flacourtia rukam* Zoll. & Moritzi - A.  
Latiff & A. Zainudin 2665 [P. Aur]  
(UKMB)

**Flagellariaceae**

- Flagellaria indica* L. - Boo, Chen & Choo  
172 [P. Aur] (SINU)

**Gnetaceae**

- c *Gnetum gnemon* L. - Boo, Chen & Choo  
331 P. Dayang  
*Gnetum latifolium* Blume var. *funiculare*  
(Blume) Markgr. - Boo, Chen & Choo  
290 [P. Aur] (SINU)  
*Gnetum macrostachyum* Hook.f. - M.R.  
Henderson, S.F.N. 18250 (SING)

**Goodeniaceae**

- Scaevola taccada* (Gaertn.) Roxb. - Boo,  
Chen & Choo 231 [P. Dayang] (SINU)

**Gramineae**

- Cyrtococcum oxyphyllum* (Steud.) Stapf  
- M.R. Henderson, S.F.N. 18225 (SING)

**Guttiferae**

- Calophyllum inophyllum* L. - Boo, Chen  
& Choo 219 [P. Dayang] (SINU)  
*Garcinia parvifolia* Miq. - Boo, Chen &  
Choo 365 [P. Aur] (SINU)

**Hypoxidaceae**

- Molinieria latifolia* (Dryand.) Herb. - Boo,  
Chen & Choo 374 [P. Aur] (SINU)

**Labiatae**

- Leucas zeylanica* (L.) R.Br. - Boo, Chen  
& Choo 339 [P. Dayang] (SINU)

**Leeaceae**

- Leea indica* (Burm.f.) Merr. - Boo, Chen

- & Choo 162 [P. Aur & P. Dayang]  
(SINU)

**Leguminosae**

- Abrus precatorius* L. - Boo, Chen & Choo  
239 [P. Dayang] (SINU)  
*Bauhinia integrifolia* Roxb. - M.R.  
Henderson, S.F.N. 18233 (SING)  
*Canavalia cathartica* Thouars - Boo, Chen  
& Choo 226 [P. Dayang] (SINU)  
*Crotalaria pallida* Aiton - Boo, Chen &  
Choo 267 [P. Aur & P. Dayang]  
(SINU)  
*Crotalaria retusa* L. - Boo, Chen & Choo  
270 [P. Aur] (SINU)  
*Crudia lanceolata* Ridl. - Boo, Chen &  
Choo 410 [P. Aur] (SINU)  
*Derris scandens* (Roxb.) Benth. - Boo,  
Chen & Choo 341 [P. Dayang] (SINU)  
*Desmodium gangeticum* (L.) DC. - Boo,  
Chen & Choo 360 [P. Aur] (SINU)  
*Desmodium heterocarpon* (L.) DC. - Boo,  
Chen & Choo 381 [P. Aur] (SINU)  
*Desmodium velutinum* (Willd.) DC. -  
Boo, Chen & Choo 281 [P. Aur]  
(SINU)  
*Flemingia strobilifera* (L.) Roxb. - M.R.  
Henderson, S.F.N. 18240 (SING)  
*Mimosa pudica* L. - Boo, Chen & Choo  
164 [P. Aur] (SINU)  
*Mucuna biplicata* Teijsm. & Binn. ex  
Kurz - Boo, Chen & Choo 425 [P. Aur]  
(SINU)  
*Pueraria phaseoloides* (Roxb.) Benth. -  
Boo, Chen & Choo 274 [P. Aur]  
(SINU)  
*Senna alata* (L.) Roxb. - Boo, Chen &  
Choo 145 [P. Aur] (SINU)  
*Senna occidentalis* (L.) Link - Boo, Chen  
& Choo 173 [P. Aur] (SINU)

**Loganiaceae**

- Fagraea auriculata* Jack - Boo, Chen &  
Choo 325 [P. Aur] (SINU)

**Malvaceae**

- Hibiscus tiliaceus* L. - A. Latiff & A. Zainudin 2 [P. Aur] (UKMB)  
*Sida cordifolia* L. - Boo, Chen & Choo 362 [P. Aur] (SINU)  
*Sida rhombifolia* L. - Boo, Chen & Choo 263 [P. Aur] (SINU)  
*Urena lobata* L. - Boo, Chen & Choo 304 [P. Dayang] (SINU)

**Melastomataceae**

- Clidemia hirta* (L.) D. Don - Boo, Chen & Choo 404 [P. Aur] (SINU)  
*Melastoma malabathricum* L. - Boo, Chen & Choo 193 [P. Aur & P. Dayang] (SINU)  
*Memecylon caeruleum* Jack - Boo, Chen & Choo 143 [P. Aur & P. Dayang] (SINU)

**Meliaceae**

- Chukrasia tabularis* A. Juss. - Boo, Chen & Choo 275 [P. Aur] (SINU)  
*Dysoxylum cauliflorum* Hiern - M.R. Henderson, S.F.N. 18354 (SING)

**Menispermaceae**

- Fibraurea tinctoria* Lour. - Boo, Chen & Choo 424 [P. Aur] (SINU)  
*Pericampylus glaucus* (Lam.) Merr. - Boo, Chen & Choo 198 [P. Aur & P. Dayang] (SINU)  
*Tinospora crispa* (L.) Hook.f. & Thomson - Boo, Chen & Choo 275 [P. Dayang] (SINU)

**Monimiaceae**

- Kibara coriacea* (Blume) Tul. - Boo, Chen & Choo 422 [P. Aur] (SINU)  
*Matthaea sancta* Blume - Boo, Chen & Choo 418 [P. Aur] (SINU)

**Moraceae**

- Ficus aurantiacea* Griff. - A. Latiff & A. Zainudin 2677 [P. Aur] (UKMB)

*Ficus recurva* Blume - Boo, Chen & Choo 375 [P. Aur] (SINU)

*Ficus superba* (Miq.) Miq. - Boo, Chen & Choo 272 [P. Aur] (SINU)

**Myristicaceae**

- Knema curtisii* (King) Warb. - M.R. Henderson, S.F.N. 18220 (SING)  
*Knema globularia* (Lam.) Warb. - M.R. Henderson, S.F.N. 18244 (SING)

**Myrsinaceae**

- Ardisia elliptica* Thunb. - Boo, Chen & Choo 320 [P. Dayang] (SINU)  
*Ardisia lanceolata* Roxb. - Boo, Chen & Choo 174 [P. Aur] (SINU)  
*Ardisia lurida* Blume - Boo, Chen & Choo 200 [P. Aur] (SINU)  
*Ardisia solanacea* Roxb. - M.R. Henderson, S.F.N. 18232 (SING)

**Myrtaceae**

- c *Psidium guajava* L. - Boo, Chen & Choo 170 [P. Aur & P. Dayang] (SINU)  
*Syzygium grande* (Wight) Walp. - Boo, Chen & Choo 300 [P. Dayang] (SINU)  
c *Syzygium jambos* (L.) Alston - Boo, Chen & Choo 201 [P. Aur] (SINU)  
*Syzygium pseudoformosum* (King) Merr. & L.M. Perry - Boo, Chen & Choo 397 [P. Aur] (SINU)

**Nyctaginaceae**

- Boerhavia diffusa* L. - Boo, Chen & Choo 214 [P. Dayang] (SINU)

**Orchidaceae**

- Cirrhopetalum puguahaanense* (Ames) Garay et al. - Boo, Chen & Choo 429 [P. Aur] (SINU)  
*Thrixspermum caranatifolium* (Ridl.) Schltr. - J. Fielding s.n., 1892 (SING)

**Palmae**

- Arenga westerhoutii* Griff. - Boo, Chen

& Choo 356 [P. Aur] (SINU)

*Daemonorops melanochaetes* Blume -  
M.R. Henderson S.F.N. 18358 (SING)

- c *Metroxylon sagu* Rottb. - Boo, Chen &  
Choo 205 [P. Aur] (SINU)

### Pandanaceae

*Freycinetia imbricata* Blume - Boo, Chen  
& Choo 408 [P. Aur] (SINU)

### Passifloraceae

*Passiflora foetida* L. - Boo, Chen & Choo  
251 [P. Aur & P. Dayang] (SINU)

### Piperaceae

- c *Piper betel* L. - Boo, Chen & Choo 376  
[P. Aur] (SINU)

### Portulacaceae

*Portulaca oleracea* L. - Boo, Chen &  
Choo 192 [P. Aur] (SINU)

*Portulaca quadrifida* L. - Boo, Chen &  
Choo 309 [P. Dayang] (SINU)

### Rosaceae

*Eriobotrya bengalensis* (Roxb.) Hook.f.  
- M.R. Henderson, S.F.N. 18211  
(SING)

*Rubus moluccanus* L. var. *angulosus*  
Kalkman - A. Latiff & A. Zainudin 2692  
[P. Aur] (UKMB)

### Rubiaceae

*Borreria laevicaulis* (Miq.) Ridl. - Boo,  
Chen & Choo 229 [P. Aur & P.  
Dayang] (SINU)

*Geophila repens* (L.) I.M. Johnst. var.  
*asiatica* (Cham. & Schldtl.) Fosberg -  
Boo, Chen & Choo 359 [P. Aur]  
(SINU)

*Hedyotis capitellata* Wall. ex G. Don -  
M.R. Henderson, S.F.N. 18356 (SING)

*Hedyotis dichotoma* Koenig ex Roth -  
Boo, Chen & Choo 371 [P. Aur]  
(SINU)

*Hedyotis tenelliflora* Blume - Boo, Chen  
& Choo 361 [P. Aur] (SINU)

*Hedyotis vestita* R. Br. ex G. Don - M.R.  
Henderson, S.F.N. 18364 (SING)

*Hymenodictyon orixense* (Roxb.) Mabb.  
- A. Latiff & A. Zainudin 2706 [P. Aur]  
(UKMB)

*Ixora javanica* (Blume) DC. - M.R.  
Henderson, S.F.N. 18218 (SING)

*Ixora nigricans* Wight & Arn. - M.R.  
Henderson, S.F.N. 18212 (SING)

*Ixora pendula* Jack - Boo, Chen & Choo  
202 [P. Aur] (SINU)

*Ixora umbellata* Koord. & Valetton - M.R.  
Henderson, S.F.N. 18219 (SING)

*Kailarsenia tentaculata* (Hook.f.) Tirveng.  
- ?Feilding 4082 (SING)

*Morinda citrifolia* L. - Boo, Chen & Choo  
247 [P. Aur] (SINU)

*Morinda elliptica* (Hook.f.) Ridl. - M.R.  
Henderson, S.F.N. 18363 (SING)

*Morinda umbellata* L. - M.R. Henderson,  
S.F.N. 18210 (SING)

*Ophiorrhiza discolor* R.Br. - Boo, Chen  
& Choo 407 [P. Aur] (SINU)

*Paederia foetida* L. - Boo, Chen & Choo  
372 [P. Aur] (SINU)

*Pavetta naucleiflora* R.Br. ex G. Don -  
M.R. Henderson, S.F.N. 18245 (SING)

*Tarenna costata* (Miq.) Merr. - M.R.  
Henderson, S.F.N. 18375 (SING)

*Timonius wallichianus* (Korth.) Valetton  
- Boo, Chen & Choo 391 [P. Aur]  
(SINU)

*Zuccarinia macrophylla* Blume - M.R.  
Henderson, S.F.N. 18213 (SING)

### Rutaceae

- c *Citrus maxima* (L.) Merr. - Boo, Chen &  
Choo 149 [P. Aur] (SINU)

*Glycosmis chlorosperma* Spreng. - Boo,  
Chen & Choo 157 [P. Aur] (SINU)

*Glycosmis mauritiana* (Lam.) Tanaka -  
Boo, Chen & Choo 313 [P. Dayang]  
(SINU)



*Glycosmis pentaphylla* (Retz.) DC. - A. Latiff & A. Zainudin 2707 [P. Aur] (UKMB)

*Murraya paniculata* (L.) Jack - Boo, Chen & Choo 207 [P. Aur] (SINU)

- c *Triphasia trifolia* (Burm.f.) P. Wilson - Boo, Chen & Choo 167 [P. Aur] (SINU)

### Sapindaceae

*Allophylus cobbe* (L.) Raeusch. - M.R. Henderson, S.F.N. 18369 (SING)

*Cardiospermum halicacabum* L. - Boo, Chen & Choo 161 [P. Aur] (SINU)

*Lepisanthes rubiginosa* (Roxb.) Leenh. - M.R. Henderson, S.F.N. 18205 (SING)

*Lepisanthes tetraphylla* (Vahl) Radlk. - M.R. Henderson, S.F.N. 18372 (SING)

### Scrophulariaceae

*Lindernia crustacea* (L.) F. Muell. - Boo, Chen & Choo 175 [P. Aur & P. Dayang] (SINU)

### Simaroubaceae

*Brucea javanica* (L.) Merr. - M.R. Henderson, S.F.N. 18207 (SING)

*Eurycoma longifolia* Jack - Boo, Chen & Choo 364 [P. Aur] (SINU)

### Solanaceae

- c *Datura metel* L. - Boo, Chen & Choo 142 [P. Aur] (SINU)

*Solanum erianthum* D. Don - M.R. Henderson, S.F.N. 18201 (SING)

### Sterculiaceae

*Leptonychia caudata* (Wall. ex G. Don) Burret - M.R. Henderson, S.F.N. 18355 (SING)

### Taccaceae

*Tacca palmata* Blume - Boo, Chen & Choo 306 [P. Dayang] (SINU)

### Tiliaceae

*Triumfetta rhomboidea* Jacq. - Boo, Chen & Choo 268 [P. Aur] (SINU)

### Umbelliferae

*Centella asiatica* (L.) Urb. - Boo, Chen & Choo 335 [P. Dayang] (SINU)

### Urticaceae

*Pouzolzia zeylanica* (L.) Benn. - Boo, Chen & Choo 190 [P. Aur] (SINU)

### Verbenaceae

*Callicarpa candicans* (Burm.f.) Hochr. - M.R. Henderson, S.F.N. 18202 (SING)

*Callicarpa longifolia* Lam. - Boo, Chen & Choo 155 [P. Aur & P. Dayang] (SINU)

*Clerodendrum laevifolium* Blume - Boo, Chen & Choo 208 [P. Aur] (SINU)

*Gmelina elliptica* Sm. - M.R. Henderson, S.F.N. 18209 (SING)

*Lantana camara* L. - Boo, Chen & Choo 188 [P. Aur] (SINU)

*Peronema canescens* Jack - Boo, Chen & Choo 153 [P. Aur] (SINU)

*Premna serratifolia* L. - Boo, Chen & Choo 244 [P. Aur] (SINU)

*Stachytarpheta indica* (L.) Vahl - Boo, Chen & Choo 221 [P. Dayang] (SINU)

*Vitex trifolia* L. - Boo, Chen & Choo 227 [P. Dayang] (SINU)

### Violaceae

*Rinorea horneri* (Korth.) Kuntze - M.R. Henderson, S.F.N. 18217 (SING)

### Vitaceae

*Cayratia japonica* (Thunb.) Gagnep. - Boo, Chen & Choo 253 [P. Aur] (SINU)

*Cayratia mollissima* (Wall.) Gagnep. - M.R. Henderson, S.F.N. 18206 (SING)

*Cayratia trifolia* (L.) Domin - A. Latiff & A. Zainudin s.n. [P. Aur] (UKMB)



- Cissus repens* Lam. - Boo, Chen & Choo  
181 [P. Aur & P. Dayang] (SINU)  
*Tetrastigma leucostaphylum* (Dennst.)  
Alston ex Mabb. - Boo, Chen & Choo  
392 [P. Aur] (SINU)  
*Tetrastigma piscicarpum* (Miq.) Planch. - A.  
Latiff & A. Zainudin 2698 [P. Aur]  
(UKMB)

## Zingiberaceae

- c *Alpinia galanga* (L.) Sw. - Boo, Chen &  
Choo 258 [P. Aur & P. Dayang]  
(SINU)  
*Alpinia mutica* Roxb. - M.R. Henderson,  
S.F.N. 18228 (SING)  
*Amomum uliginosum* J. König - Boo,  
Chen & Choo 369 [P. Aur] (SINU)

## Pulau Pemanggil

## PTERIDOPHYTA

### Aspleniaceae

- Asplenium affine* Sw. - A. Latiff & A.  
Zainudin s.n. (UKMB)  
*Asplenium polyodon* G. Forst. - A. Latiff  
& A. Zainudin s.n. (UKMB)  
*Asplenium robustum* Blume - A. Latiff &  
A. Zainudin s.n. (UKMB)

### Dryopteridaceae

- Pleocnemia irregularis* (C. Presl) Holttum  
- Boo, Chen & Choo 95 (SINU)

### Lycopodiaceae

- Huperzia phlegmaria* (L.) Rothm. - Md.  
Noor & Samsuri 24 (SING)

### Marratiaceae

- Angiopteris evecta* (G. Forst.) Hoffm. -  
Boo, Chen & Choo 84 (SINU)

### Oleandraceae

- Nephrolepis acutifolia* (Desv.) H. Christ  
- Boo, Chen & Choo 127 (SINU)  
*Nephrolepis cordifolia* (L.) C. Presl - R.  
Jaman 480 (UKMB)  
*Nephrolepis hirsutula* (G. Forst.) C. Presl  
- Boo, Chen & Choo 55 (SINU)

### Pteridaceae

- Acrostichum aureum* L. - Boo, Chen &  
Choo 112 (SINU)

- Pteris ensiformis* Burm.f. - Boo, Chen &  
Choo 126 (SINU)  
*Pteris venulosa* Blume - R. Jaman 474  
(UKMB)

### Selaginellaceae

- Selaginella plana* (Desv.) Hieron. - Boo,  
Chen & Choo 77 (SINU)  
*Selaginella wilddenowii* (Desv.) Baker - R.  
Jaman 479 (UKMB)

### Thelypteridaceae

- Amphineuron terminans* (Hook.) Holttum  
- Boo, Chen & Choo 77 (SINU)

### Vittariaceae

- Vittaria angustifolia* Blume - A. Latiff &  
A. Zainudin s.n. (UKMB)

## SPERMATOPHYTA

### Amaranthaceae

- Deeringia polysperma* (Roxb.) Moq. - Md.  
Noor & Samsuri 49 (SING)

### Amaryllidaceae

- c *Hippeastrum reticulatum* (L'Hér.) Herb.  
- Shafiee Daud s.n. (UKMB)

### Ancistrocladaceae

- Ancistrocladus tectorius* (Lour.) Merr. -  
Shafiee Daud s.n. (UKMB)

**Annonaceae**

- c *Cananga odorata* (Lam.) Hook.f. & Thomson - Boo, Chen & Choo 76 (SINU)

**Apocynaceae**

- Aganosma marginata* (Roxb.) G. Don - Boo, Chen & Choo 66 (SINU)  
*Aganosma wallichii* G. Don - Md. Noor & Samsuri 54 (SING)  
*Catharanthus roseus* (L.) G. Don - Saidah Mamat s.n. (UKMB)

**Araceae**

- Aglaonema nitidum* (Jack) Kunth - Ramli Khamis s.n. (UKMB)  
*Aglaonema simplex* Blume - Ramli Khamis s.n. (UKMB)  
*Epipremnum giganteum* (Roxb.) Schott - A. Latiff & A. Zainudin 156 (UKMB)  
*Schismatoglottis calypttrata* (Roxb.) Zoll. & Moritz - Boo, Chen & Choo 94 (SINU)  
*Scindapsus beccarii* Engl. - Boo, Chen & Choo 38 (SINU)

**Araliaceae**

- Schefflera elliptica* (Blume) Harms - Boo, Chen & Choo 16 (SINU)  
*Schefflera oxyphylla* (Miq.) R. Vig. - Boo, Chen & Choo 57 (SINU)

**Asclepiadaceae**

- Hoya diversifolia* Blume - Md. Noor & Samsuri 32 (SING)  
*Marsdenia acuminata* (Roxb.) I.M. Turner - Boo, Chen & Choo 120 (SINU)

**Cecropiaceae**

- Poikilospermum suaveolens* (Blume) Merr. - Md. Noor & Samsuri 38 (SING)

**Celastraceae**

- Loesneriella macrantha* (Korth.) A.C. Sm. - Md. Noor & Samsuri 19 (SING)

- Microtropis valida* Ridl. - Md. Noor & Samsuri 41 (SING)

**Combretaceae**

- Combretum tetralophum* C.B. Clarke - Boo, Chen & Choo 13 (SINU)  
*Quisqualis indica* L. - Boo, Chen & Choo 46 (SINU)  
*Terminalia catappa* L. - Boo, Chen & Choo 106 (SINU)

**Commelinaceae**

- Belosynapsis ciliata* (Blume) R.S. Rao - Boo, Chen & Choo 48 (SINU)  
*Commelina diffusa* Burm.f. - Boo, Chen & Choo 70 (SINU)

**Compositae**

- Blumea balsamifera* (L.) DC. - Md. Noor & Samsuri 59 (SING)  
*Complaya trilobata* (L.) Strother - Boo, Chen & Choo 122 (SINU)  
*Conyza bonariensis* (L.) Cronquist - Md. Noor & Samsuri 55 (SING)  
*Vernonia cinerea* (L.) Less. - Boo, Chen & Choo 40 (SINU)  
*Wollastonia biflora* (L.) DC. - Boo, Chen & Choo 20 (SINU)

**Convolvulaceae**

- c *Ipomoea batatas* (L.) Lam. - Arishah Hashim s.n. (UKMB)  
*Ipomoea mauritiana* Jacq. - Boo, Chen & Choo 45 (SINU)  
*Ipomoea pes-caprae* (L.) R.Br. - Boo, Chen & Choo 123 (SINU)

**Crassulaceae**

- c *Kalanchoe laciniata* (L.) DC. - Boo, Chen & Choo 41 (SINU)  
*Kalanchoe pinnata* (Lam.) Pers. - Boo, Chen & Choo 102 (SINU)

**Cycadaceae**

- Cycas rumphii* Miq. - Boo, Chen & Choo 141 (SINU)

**Dilleniaceae**

- Tetracera indica* (Christm. & Panz.) Merr.  
- Boo, Chen & Choo 98 (SINU)

**Dracaenaceae**

- Dracaena maingayi* Hook.f. - Boo, Chen  
& Choo 61 (SINU)

**Euphorbiaceae**

- Actephila excelsa* (Dalzell) Müll.Arg. var.  
*javanica* (Miq.) Pax & K. Hoffm. - Md.  
Noor & Samsuri MN14 (SING)
- Antidesma cuspidatum* Müll.Arg. - Boo,  
Chen & Choo 85 (SINU)
- Antidesma japonicum* Siebold. & Zucc. -  
Rahim Hamid s.n. (UKMB)
- Breynia reclinata* (Roxb.) Hook.f. - Boo,  
Chen & Choo 26 (SINU)
- Breynia vitis-idaea* (Burm.f.) C.E.C.  
Fisch. - Md. Noor & Samsuri 9 (SING)
- Mallotus moritzianus* Müll.Arg. - Md.  
Noor & Samsuri 17 (SING)
- Mallotus paniculatus* (Lam.) Müll.Arg. -  
Saidah Mamat s.n. (UKMB)
- Mallotus philippensis* (Lam.) Müll.Arg. -  
Shafiee Daud s.n. (UKMB)
- c *Manihot esculenta* Crantz - Boo, Chen &  
Choo 81 (SINU)
- Margaritaria indica* (Dalzell) Airy Shaw  
- Boo, Chen & Choo 18 (SINU)
- Melanolepis multiglandulosa* (Reinw. ex  
Blume) Rchb.f. & Zoll. - Boo, Chen  
& Choo 72 (SINU)
- Phyllanthus pulcher* Wall. ex Müll.Arg. -  
Boo, Chen & Choo 113 (SINU)
- Suregada multiflora* (Juss.) Baill. - A. Latiff  
& A. Zainudin 148 (UKMB)

**Flacourtiaceae**

- c *Flacourtia jangomas* (Lour.) Raeusch. -  
Boo, Chen & Choo 111 (SINU)

**Flagellariaceae**

- Flagellaria indica* L. - Boo, Chen & Choo  
116 (SINU)

**Gesneriaceae**

- Didymocarpus tiumanicus* (Ridl.) B.L.  
Burt - Md. Noor & Samsuri MN72  
(SING)

**Gnetaceae**

- c *Gnetum gnemon* L. - Boo, Chen & Choo  
90 (SINU)
- Gnetum latifolium* Blume var. *funiculare*  
(Blume) Markgr. - Md. Noor & Samsuri  
MN68 (SING)

**Goodeniaceae**

- Scaevola taccada* (Gaertn.) Roxb. - Boo,  
Chen & Choo 105 (SINU)

**Gramineae**

- Centotheca lappacea* (L.) Desv. - Boo,  
Chen & Choo 69 (SINU)
- Oplismenus compositus* (L.) P. Beauv. -  
Md. Noor & Samsuri 50 (SING)

**Guttiferae**

- Calophyllum inophyllum* L. - Boo, Chen  
& Choo 107 (SINU)
- Garcinia hombroniana* Pierre - Md. Noor  
& Samsuri 25 (SING)

**Joinvilleaceae**

- Joinvillea ascendens* Brongn. & Gris. ssp.  
*borneensis* (Becc.) Newell - Arishah  
Hashim 43 (UKMB)

**Labiatae**

- Leucas zeylanica* (L.) R.Br. - Boo, Chen  
& Choo 34 (SINU)
- Ocimum tenuiflorum* L. - Boo, Chen &  
Choo 23 (SINU)
- c *Solenostemon scutellarioides* (L.) Codd -  
Shafiee Daud s.n. (UKMB)

**Lauraceae**

- Cassytha filiformis* L. - Boo, Chen &  
Choo 25 (SINU)
- Litsea glutinosa* (Lour.) C.B. Rob. - Md.  
Noor & Samsuri 6 (SING)

**Lecythidaceae**

*Barringtonia asiatica* (L.) Kurz - Boo, Chen & Choo 346

**Leeaceae**

*Leea indica* (Burm.f.) Merr. - Md. Noor & Samsuri 4 (SING)

**Leguminosae**

*Abrus precatorius* L. - Boo, Chen & Choo 117 (SINU)

*Archidendron jiringa* (Jack) I.C. Nielsen - Arishah Hashim 60 (UKMB)

*Bauhinia integrifolia* Roxb. - Boo, Chen & Choo 9 (SINU)

*Canavalia cathartica* Thouars - Md. Noor & Samsuri 60 (SING)

c *Cassia fistula* L. - Saidah Mamat 32 (UKMB)

*Crotalaria pallida* Aiton - Boo, Chen & Choo 29 (SINU)

*Derris scandens* (Roxb.) Benth. - Boo, Chen & Choo 118 (SINU)

*Desmodium velutinum* (Willd.) DC. - Boo, Chen & Choo 6 (SINU)

*Flemingia strobilifera* (L.) Roxb. - Boo, Chen & Choo 133 (SINU)

*Mucuna biplicata* Teijsm. & Binn. ex Kurz - Arishah Hashim 73 (UKMB)

c *Psophocarpus tetragonolobus* (L.) DC. - Rahim Hamid s.n. (UKMB)

*Pueraria phaseoloides* (Roxb.) Benth. - Boo, Chen & Choo 8 (SINU)

*Vigna marina* (Burm.) Merr. - Boo, Chen & Choo 10 (SINU)

**Lythraceae**

*Pemphis acidula* J.R. Forst & G. Forst. - Shafiee Daud s.n. (UKMB)

**Malvaceae**

c *Abelmoschus moschatus* Medik. - Zainal Mustafa s.n. (UKMB)

*Abutilon indicum* (L.) Sweet - Rahim Hamid s.n. (UKMB)

*Hibiscus tiliaceus* L. - Boo, Chen & Choo 100 (SINU)

*Sida acuta* Burm.f. - Boo, Chen & Choo 24 (SINU)

*Thespesia populnea* (L.) Sol. ex Corrêa - Md. Noor & Samsuri 53 (SING)

*Urena lobata* L. - Boo, Chen & Choo 11 (SINU)

**Melastomataceae**

*Medinilla crassifolia* (Reinw. ex Blume) Blume - Zainal Mustafa s.n. (UKMB)

*Memecylon caeruleum* Jack - Boo, Chen & Choo 47 (SINU)

*Memecylon edule* Roxb. - Boo, Chen & Choo 30 (SINU)

*Pogonanthera pulverulenta* (Jack) Blume - Boo, Chen & Choo 54 (SINU)

**Menispermaceae**

*Pericampylus glaucus* (Lam.) Merr. - Boo, Chen & Choo 32 (SINU)

*Stephania capitata* (Blume) Spreng. - Boo, Chen & Choo 80 (SINU)

**Moraceae**

*Artocarpus lanceifolius* Roxb. - A. Latiff & A. Zainudin 132 (UKMB)

*Ficus callosa* Willd. - Rahim Ahmad 65 (UKMB)

*Ficus deltoidea* Jack - Arishah Hashim 66 (UKMB)

*Ficus drupacea* Thunb. - Boo, Chen & Choo 63 (SINU)

*Ficus hispida* L.f. - Boo, Chen & Choo 52 (SINU)

*Ficus schwarzii* Koord. - A. Latiff & A. Zainudin 134 (UKMB)

*Ficus superba* (Miq.) Miq. - Boo, Chen & Choo 43 (SINU)

*Ficus tinctoria* G. Forst. ssp. *gibbosa* (Blume) Corner - Boo, Chen & Choo 7 (SINU)

*Streblus ilicifolius* (Vidal) Corner - Boo, Chen & Choo 92 (SINU)

**Myristicaceae**

*Knema laurina* (Blume) Warb. - Md. Noor & Samsuri 69 (SING)

**Myrsinaceae**

*Ardisia elliptica* Thunb. - Arishah Hashim 67 (UKMB)

*Ardisia oxyphylla* Wall. ex DC. - A. Latiff & A. Zainudin 1394 (UKMB)

*Ardisia villosa* Roxb. - Md. Noor & Samsuri 74 (SING)

**Myrtaceae**

c *Psidium guajava* L. - Boo, Chen & Choo 37 (SINU)

**Nyctaginaceae**

*Boerhavia diffusa* L. - Boo, Chen & Choo 2 (SINU)

**Onagraceae**

*Ludwigia hyssopifolia* (G. Don) Exell - Boo, Chen & Choo 87 (SINU)

**Opiliaceae**

*Lepionurus sylvestris* Blume - Md. Noor & Samsuri 67 (SING)

**Orchidaceae**

*Cymbidium finlaysonianum* Lindl. - Md. Noor & Samsuri 28 (SING)

*Dendrobium crumenatum* Sw. - Boo, Chen & Choo 62 (SINU)

*Eulophia spectabilis* (Dennst.) Suresh - Boo, Chen & Choo 109 (SINU)

*Phaius callosus* (Blume) Lindl. - Md. Noor & Samsuri 26 (SING)

**Palmae**

*Daemonorops angustifolia* (Griff.) Mart. - Arishah Hashim s.n. (UKMB)

*Daemonorops sabut* Becc. - R. Jaman 484 (UKMB)

*Daemonorops sepal* Becc. - Shafiee Daud 49 (UKMB)

*Nypa fruticans* Wurmb - Boo, Chen & Choo 114 (SINU)

**Pandanaceae**

*Pandanus dubius* Spreng. - Boo, Chen & Choo 138 (SINU)

**Passifloraceae**

*Passiflora foetida* L. - Boo, Chen & Choo 71 (SINU)

**Rhamnaceae**

*Gouania leptostachya* DC. - A. Latiff & A. Zainudin 133 (UKMB)

**Rubiaceae**

*Canthium glabrum* Blume - A. Latiff & A. Zainudin 135 (UKMB)

*Chasalia chartacea* Craib - Ramli Khamis 41 (UKMB)

*Hedyotis biflora* (L.) Lam. - Boo, Chen & Choo 139 (SINU)

*Hedyotis dichotoma* Koenig ex Roth - Boo, Chen & Choo 130 (SINU)

*Lasianthus barbellatus* Ridl. - Md Noor & Samsuri 48 (SING)

*Morinda citrifolia* L. - Boo, Chen & Choo 101 (SINU)

*Prismatomeris tetranda* (Roxb.) K. Schum. ssp. *malayana* (Ridl.) J.T. Johanss. - Md. Noor & Samsuri 23 (SING)

*Tarenna mollis* (Wall. ex Hook.f.) B.L. Rob. - Shafiee Daud 47 (UKMB)

**Rutaceae**

*Atalantia monophylla* (L.) DC. - Boo, Chen & Choo 136 (SINU)

*Glycosmis mauritiana* (Lam.) Tanaka - Boo, Chen & Choo 119 (SINU)

*Murraya paniculata* (L.) Jack - Boo, Chen & Choo 110 (SINU)

**Sapindaceae**

*Allophylus cobbe* (L.) Raeusch. - Boo, Chen & Choo 51 (SINU)



**Sapotaceae**

*Pouteria linggensis* (Burck) Baehni - Md. Noor & Samsuri 35 (SING)

**Simaroubaceae**

*Brucea javanica* (L.) Merr. - Md. Noor & Samsuri 12 (SING)

**Solanaceae**

*Physalis ?pubescens* L. - Boo, Chen & Choo 49 (SINU)  
*Solanum nigrum* L. - Boo, Chen & Choo 79 (SINU)  
*Solanum torvum* Sw. - Md. Noor & Samsuri 15 (SING)

**Stemonaceae**

*Stemona curtisii* Hook.f. - Boo, Chen & Choo 104 (SINU)

**Sterculiaceae**

*Leptonychia caudata* (Wall. ex G. Don) Burret - Md. Noor & Samsuri 42 (SING)

**Turneraceae**

*Turnera ulmifolia* L. - Boo, Chen & Choo 5 (SINU)

**Ulmaceae**

*Trema tomentosa* (Roxb.) Hara - Md. Noor & Samsuri 5 (SING)

**Verbenaceae**

*Callicarpa longifolia* Lam. - Boo, Chen & Choo 15 (SINU)

c *Clerodendrum calamitosum* L. - Boo, Chen & Choo 4 (SINU)

*Clerodendrum inerme* (L.) Gaertn. - Boo, Chen & Choo 27 (SINU)

c *Clerodendrum serratum* (L.) Moon - Arishah Hashim 90 (UKMB)

c *Clerodendrum thomsonae* Balf.f. - Md. Noor & Samsuri 11 (SING)

*Lantana camara* L. - Boo, Chen & Choo 22 (SINU)

*Vitex trifolia* L. - Boo, Chen & Choo 108 (SINU)

**Violaceae**

*Rinorea bengalensis* (Wall.) Kuntze - Md. Noor & Samsuri 43 (SING)

**Vitaceae**

*Ampelocissus cinnamomea* (Wall.) Planch. - Saidah Mamat s.n. (UKMB)

*Cissus nodosa* Blume - A. Latiff & A. Zainudin 138 (UKMB)

*Cissus repens* Lam. - A. Latiff & A. Zainudin s.n. (UKMB)

*Tetrastigma leucostaphylum* (Dennst.) Alston ex Mabb. - A. Latiff & A. Zainudin 122 (UKMB)

*Tetrastigma pedunculare* (Wall. ex Lawson) Planch. - A. Latiff & A. Zainudin s.n. (UKMB)

**Pulau Besar****PTERIDOPHYTA****Adiantaceae**

*Adiantum stenochlamys* Baker - C.L. Loh PB-20 (SINU)

**Blechnaceae**

*Blechnum finlaysonianum* Wall. ex Hook. & Grev. - C.L. Loh PB-30 (SINU)

*Stenochlaena palustris* (Burm.) Bedd. - C.L. Loh PB-22 (SINU)

**Oleandraceae**

*Nephrolepis auriculata* (L.) Trimen - C.L. Loh PB-28 (SINU)



**Schizaeaceae**

- Lygodium circinnatum* (Burm.f.) Sw. - C.L.  
Loh PB-4 (SINU)

**SPERMATOPHYTA****Anacardiaceae**

- c *Anacardium occidentale* L. - C.L. Loh  
PB-37 (SINU)

**Apocynaceae**

- c *Thevetia peruviana* (Pers.) K. Schum. -  
C.L. Loh PB-16 (SINU)

**Asclepiadaceae**

- Hoya verticillata* (Vahl) G. Don - C.L. Loh  
PB-10 (SINU)

**Cycadaceae**

- Cycas rumphii* Miq. - C.L. Loh PB-41  
(SINU)

**Erythroxylaceae**

- Erythroxylum cuneatum* (Miq.) Kurz -  
C.L. Loh PB-42 (SINU)

**Euphorbiaceae**

- Antidesma cuspidatum* Müll.Arg. - C.L.  
Loh PB-3 (SINU)  
*Breynia reclinata* (Roxb.) Hook.f. - C.L.  
Loh PB-17 (SINU)  
*Macaranga heynei* I.M. Johnst. - C.L. Loh  
PB-40 (SINU)  
*Phyllanthus oxyphyllus* Miq. - C.L. Loh  
PB-23 (SINU)  
*Suregada multiflora* (Juss.) Baill. - C.L.  
Loh PB-33 (SINU)

**Guttiferae**

- Calophyllum inophyllum* L. - C.L. Loh PB-  
36 (SINU)

**Lecythidaceae**

- Barringtonia macrostachya* (Jack) Kurz -  
C.L. Loh PB-26 (SINU)

**Leguminosae**

- Dendrolobium umbellatum* (L.) Benth. -  
C.L. Loh PB-9 (SINU)  
c *Tamarindus indica* L. - C.L. Loh PB-19  
(SINU)

**Loranthaceae**

- Dendrophthoe pentandra* (L.) Miq. - C.L.  
Loh PB-13 (SINU)

**Malvaceae**

- Hibiscus tiliaceus* L. - C.L. Loh PB-14  
(SINU)

**Moraceae**

- Ficus fistulosa* Reinw. ex Blume - C.L. Loh  
PB-38 (SINU)

**Moringaceae**

- c *Moringa oleifera* Lam. - C.L. Loh PB-12  
(SINU)

**Myrsinaceae**

- Ardisia elliptica* Thunb. - C.L. Loh PB-1  
(SINU)

**Myrtaceae**

- Rhodomyrtus tomentosa* (Aiton) Hassk.  
- C.L. Loh PB-45 (SINU)  
*Syzygium grande* (Wight) Walp. - C.L. Loh  
PB-11 (SINU)

**Oleaceae**

- Olea brachiata* (Lour.) Merr. - C.L. Loh  
PB-31 (SINU)

**Opiliaceae**

- Cansjera rheedei* J.F. Gmel. - C.L. Loh PB-  
8 (SINU)

**Polygalaceae**

- Polygala paniculata* L. - C.L. Loh PB-46  
(SINU)

**Rubiaceae**

*Guettarda speciosa* L. - C.L. Loh PB-18 (SINU)

*Timonius compressicaulis* (Miq.) Boerl. - C.L. Loh PB-2 (SINU)

**Santalaceae**

*Dendrotrophe varians* (Blume) Miq. - C.L. Loh PB-48 (SINU)

**Sapindaceae**

*Guioa pleuropteris* (Blume) Radlk. - C.L. Loh PB-7 (SINU)

**Simaroubaceae**

*Brucea javanica* (L.) Merr. - C.L. Loh PB-25 (SINU)

**Theaceae**

*Gordonia multinervis* King - C.L. Loh PB-5 (SINU)

**Umbelliferae**

*Centella asiatica* (L.) Urban - C.L. Loh PB-34 (SINU)

**Verbenaceae**

*Vitex pinnata* L. - C.L. Loh PB-29 (SINU)

**Pulau Yu****PTERIDOPHYTA****Oleandraceae**

*Nephrolepis acutifolia* (Desv.) H. Christ. - B. Molesworth Allen 2575 (SING)

**SPERMATOPHYTA****Celastraceae**

*Salacia chinensis* L. - B. Molesworth Allen s.n., 30 July 1955 (SING)

**Guttiferae**

*Calophyllum soulattri* Burm.f. - B. Molesworth Allen s.n., 30 July 1955 (SING)

**Myrsinaceae**

*Ardisia elliptica* Thunb. - B. Molesworth Allen s.n., 30 July 1955 (SING)

**Rubiaceae**

*Gynochthodes sublanceolata* Miq. - B. Molesworth Allen s.n., 30 July 1955 (SING)

*Ixora javanica* (Blume) DC. - B. Molesworth Allen s.n., 30 July 1955 (SING)

*Timonius compressicaulis* (Miq.) Boerl. - B. Molesworth Allen s.n., 30 July 1955 (SING)

**Sapindaceae**

*Guioa pleuropteris* (Blume) Radlk. - B. Molesworth Allen s.n., 30 July 1955 (SING)

*Mischocarpus sundaicus* Blume - B. Molesworth Allen s.n., 30 July 1955 (SING)

**Verbenaceae**

*Premna serratifolia* L. - B. Molesworth Allen s.n., 30 July 1955 (SING)